



# PATENT APPLICATION IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Ba-Zhong Shen, Ph.D.,

Examiner: n/a

Hau Thien Tran, and Dr. Kelly Brian Cameron

Application Serial No: 10/802,023

Art Group: 2631

**Application Filing Date**: 03/16/2004

**Confirmation No: 2630** 

Patent No: n/a

Attorney Docket No: BP3089CIP

ratent No. II/a

Patent Issue Date: n/a

Title: LDPC (Low Density Parity Check) coded modulation symbol decoding using non-

Gray code maps for improved performance

Date: Tuesday, August 31, 2004 (08/31/04)

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### Dear Sir or Madam:

It is requested that the enclosed reference(s) listed on the attached Information Disclosure Statement by Applicant be considered by the Examiner in connection with the above-identified patent application and be made of record therein. A European Search Report has been made for a related EP patent application. The cover letter provided by our foreign associate and the actual European Search Report are being submitted herewith in addition to copies of the reference(s) cited within the European Search Report.

### Certification Under 37 C.F.R. § 1.97(e)(1)

Independent consideration and acknowledgment of the enclosed references is respectfully requested.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present patent application, or if the Examiner has any additional questions or concerns.

RESPECTFULLY SUBMITTED,

Bv:

Shayne X. Short, Ph.D.

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	FORM	First Named Inventor	Ba-Zhong Shen, Ph.D.
(to be used for	all correspondence after initial	filing) Art Unit	2631
		Examiner Name	n/a
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Sheet 1

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known			
Application Number	10/802,023		
Filing Date	03/16/2004		
First Named Inventor	Ba-Zhong Shen, Ph.D.		
Art Unit	2631		
Examiner Name	n/a		
Attorney Docket Number	BP3089CIP		

				DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	₽°
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	Application Number	10/802,023	
INFORMATION DISCLOSURE		03/16/2004	
STATEMENT BY APPLICANT	First Named Inventor	Ba-Zhong Shen, Ph.D.	
(Use as many sheets as necessary)	Art Unit	2631	
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Sheet 2 of 2	Attorney Docket Number	BP3089	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		WADAYAMA 1: "A CODED MODULATION SCHEME BASED ON LOW DENSITY PARITY CHECK CODES" IEICE TRANSACTIONS ON FUNDAMENTALS OF ELECTRONICS, COMMUNICATIONS AND COMPUTER SCIENCES, INSTITUTE OF ELECTRONICS INFORMATION AND COMM. ENG. TOKYO, JP, vol. E84A, no. 10, October 2001 (2001—10), pages 2523—2527, XPOO1107784 ISSN: 0916—8508 * the whole document *	
		MITTELHOLZER T ET AL: "Reduced—complexity decoding of low density parity check codes for generalized partial response channels" IEEE TRANSACTIONS ON MAGNETICS, IEEE INC. NEW YORK, US, vol. 37, no. 2, pt1, March 2001 (2001—03), pages 721—728, XP002177074 ISSN: 0018—9464 * the whole document *	
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Examiner	Date	
Signature	Considered	

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